

KCNA6 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17189a**Specification**

KCNA6 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	P17658
Other Accession	P17659 , Q61923 , NP_002226.1
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	58729
Antigen Region	1-30

KCNA6 Antibody (N-term) - Additional Information**Gene ID** 3742**Other Names**

Potassium voltage-gated channel subfamily A member 6, Voltage-gated potassium channel HBK2, Voltage-gated potassium channel subunit Kv16, KCNA6

Target/Specificity

This KCNA6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human KCNA6.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

KCNA6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNA6 Antibody (N-term) - Protein Information**Name** KCNA6

Function Voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes. Forms tetrameric potassium- selective channels through which potassium ions pass in accordance with their electrochemical gradient (PubMed:[14575698](#), PubMed:[2347305](#)). The channel alternates between opened and closed conformations in response to the voltage difference across the membrane (PubMed:[14575698](#), PubMed:[2347305](#)). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNA1, KCNA2, KCNA4, KCNA6, and possibly other family members as well; channel properties depend on the type of alpha subunits that are part of the channel (By similarity). Channel properties are modulated by cytoplasmic beta subunits that regulate the subcellular location of the alpha subunits and promote rapid inactivation (By similarity). Homotetrameric channels display rapid activation and slow inactivation (PubMed:[2347305](#)).

Cellular Location

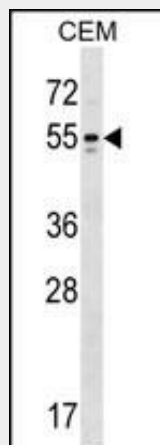
Cell membrane; Multi-pass membrane protein

KCNA6 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KCNA6 Antibody (N-term) - Images



KCNA6 Antibody (N-term) (Cat. #AP17189a) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the KCNA6 antibody detected the KCNA6 protein (arrow).

KCNA6 Antibody (N-term) - Background

Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle

contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in *Drosophila*, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It belongs to the delayed rectifier class. The coding region of this gene is intronless, and the gene is clustered with genes *KCNA1* and *KCNA5* on chromosome 12.

KCNA6 Antibody (N-term) - References

Rose, J.E., et al. *Mol. Med.* 16 (7-8), 247-253 (2010) :
Tan, K.M., et al. *Neurology* 70(20):1883-1890(2008)
Yusifov, T., et al. *Proc. Natl. Acad. Sci. U.S.A.* 105(1):376-381(2008)
Lamesch, P., et al. *Genomics* 89(3):307-315(2007)
Gutman, G.A., et al. *Pharmacol. Rev.* 57(4):473-508(2005)